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SEQUENCE LISTING

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de Waal Malefyt, Rene
Cheung, Jeanne

<120> MAMMALIAN CYTOKINES; RELATED REAGENTS

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<140> US 10/000,776

<141> 2001-11-30

<150> 09/791,497

<151> 2001-02-22

<150> 09/627,897

<151> 2000-07-27

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<151> 1999-08-06

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Gly Arg Pro Gln Leu Ser Leu Gln Glu Leu Arg Arg Glu Phe Thr Val
35 40 45

Ser Leu His Leu Ala Arg Lys Leu Leu Ser Glu Val Arg Gly Gln Ala
50 55 60

His Arg Phe Ala Glu Ser His Leu Pro Gly Val Asn Leu Tyr Leu Leu
65 70 75 80

Pro Leu Gly Glu Gln Leu Pro Asp Val Ser Leu Thr Phe Gln Ala Trp
85 90 95

Arg Arg Leu Ser Asp Pro Glu Arg Leu Cys Phe Ile Ser Thr Thr Leu
100 105 110

Gln Pro Phe His Ala Pro Leu Gly Gly Leu Gly Thr Gln Gly Arg Trp
115 120 125

Thr Asn Met Glu Arg Met Gln Leu Trp Ala Met Arg Leu Asp Leu Arg

130

135

140

Asp Leu Gln Arg His Leu Arg Phe Gln Val Leu Ala Ala Gly Phe Asn
 145 150 155 160

Leu Pro Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Arg
 165 170 175

Lys Gly Leu Leu Pro Gly Ala Leu Gly Ser Ala Leu Gln Gly Pro Ala
 180 185 190

Gln Val Ser Trp Pro Gln Leu Leu Ser Thr Tyr Arg Leu Leu His Ser
 195 200 205

Leu Glu Leu Val Leu Ser Arg Ala Val Arg Glu Leu Leu Leu Ser
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Gln Pro

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Phe Thr Val Ser Leu Tyr Leu Ala Arg Lys Leu Leu Ser Glu Val Gln
35 40 45

Gly Tyr Val His Ser Phe Ala Glu Ser Arg Leu Pro Gly Val Asn Leu
50 55 60

Asp Leu Leu Pro Leu Gly Tyr His Leu Pro Asn Val Ser Leu Thr Phe
65 70 75 80

Gln Ala Trp His His Leu Ser Asp Ser Glu Arg Leu Cys Phe Leu Ala
85 90 95

Thr Thr Leu Arg Pro Phe Leu Ala Met Leu Gly Gly Leu Gly Thr Gln
100 105 110

Gly Thr Trp Thr Asn Ile Lys Arg Met Gln Gln Trp Arg Leu Ser Leu
 115 120 125

Val Leu Asp Val Ala Leu Cys Val Phe Arg Ser Gln Val Leu Ala Ala
 130 135 140

Gly Phe Lys Cys Ser Lys Glu Glu Glu Asp Lys Glu Glu Glu Glu Glu
 145 150 155 160

Glu Glu Glu Glu Glu Lys Lys Leu Pro Leu Gly Arg Leu Gly Gly Pro
 165 170 175

Asn Gln Val Ser Ser Gln Val Ser Trp Pro Gln Leu Leu Tyr Thr Tyr
 180 185 190

Gln Leu Leu His Ser Met Glu Leu Val Leu Ser Arg Ala Val Arg Asp
 195 200 205

Leu Leu Leu Leu Ser Leu Pro Arg Arg Pro Gly Ser Ala Leu Glu Phe
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Leu Thr Pro Ser Phe Lys Pro
 225 230

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Pro Gly Arg Pro Gln Leu Ser Leu Gln Glu Leu Arg Arg Glu Phe Thr
 35 40 45

Val Ser Leu His Leu Ala Arg Lys Leu Leu Ser Glu Val Arg Gly Gln
 50 55 60

Ala His Arg Phe Ala Glu Ser His Leu Pro Gly Val Asn Leu Tyr Leu
 65 70 75 80

Leu Pro Leu Gly Glu Gln Leu Pro Asp Val Ser Leu Thr Phe Gln Ala
 85 90 95

Trp Arg Arg Leu Ser Asp Pro Glu Arg Leu Cys Phe Ile Ser Thr Thr
 100 105 110

Leu Gln Pro Phe His Ala Pro Leu Gly Gly Leu Gly Thr Gln Gly Arg
 115 120 125

Trp Thr Asn Met Glu Arg Met Gln Leu Trp Ala Met Arg Leu Asp Leu
 130 135 140

Arg Asp Leu Gln Arg His Leu Arg Phe Gln Val Leu Ala Ala Gly Phe
 145 150 155 160

Asn Leu Pro Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu Glu
 165 170 175

Arg Lys Gly Leu Leu Pro Gly Ala Leu Gly Ser Ala Leu Gln Gly Pro
 180 185 190

Ala Gln Val Ser Trp Pro Gln Leu Leu Ser Thr Tyr Arg Leu Leu His

195

200

205

Ser Leu Glu Leu Val Leu Ser Arg Ala Val Arg Glu Leu Leu Leu Leu
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Pro Gln Pro

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<213> Mus musculus

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Pro Leu Ser Leu Gln Glu Leu Arg Arg Glu Phe Thr Val Ser Leu Tyr
35 40 45

Leu Ala Arg Lys Leu Leu Ser Glu Val Gln Gly Tyr Val His Ser Phe
50 55 60

Ala Glu Ser Arg Leu Pro Gly Val Asn Leu Asp Leu Leu Pro Leu Gly
65 70 75 80

Tyr His Leu Pro Asn Val Ser Leu Thr Phe Gln Ala Trp His His Leu
85 90 95

Ser Asp Ser Glu Arg Leu Cys Phe Leu Ala Thr Thr Leu Arg Pro Phe
100 105 110

Pro Ala Met Leu Gly Gly Leu Gly Thr Gln Gly Thr Trp Thr Ser Ser
115 120 125

Glu Arg Glu Gln Leu Trp Ala Met Arg Leu Asp Leu Arg Asp Leu His
130 135 140

Arg His Leu Arg Phe Gln Val Leu Ala Ala Gly Phe Lys Cys Ser Lys
145 150 155 160

Glu Glu Glu Asp Lys Glu Glu Glu Glu Glu Glu Glu Glu Glu Lys
165 170 175

Lys Leu Pro Leu Gly Ala Leu Gly Gly Pro Asn Gln Val Ser Ser Gln
180 185 190

Val Ser Trp Pro Gln Leu Leu Tyr Thr Tyr Gln Leu Leu His Ser Leu
 195 200 205

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 210 215 220

Pro Arg Arg Pro Gly Ser Ala Trp Asp Ser
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 Ala Ser Cys Pro Pro Cys Ser Gly Arg Lys Gly Pro Pro Ala Ala Leu
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aca ctg ccc cgg gtg caa tgc cga gcc tct cgg tac ccg atc gcc gtg 145
 Thr Leu Pro Arg Val Gln Cys Arg Ala Ser Arg Tyr Pro Ile Ala Val
 30 35 40

gat tgc tcc tgg acc ctg ccg cct gct cca aac tcc acc agc ccc gtg 193
 Asp Cys Ser Trp Thr Leu Pro Pro Ala Pro Asn Ser Thr Ser Pro Val
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tcc ttc att gcc acg tac agg ctc ggc atg gct gcc cgg ggc cac agc 241
 Ser Phe Ile Ala Thr Tyr Arg Leu Gly Met Ala Ala Arg Gly His Ser
 65 70 75

tgg ccc tgc ctg cag cag acg cca acg tcc acc agc tgc acc atc acg 289
 Trp Pro Cys Leu Gln Gln Thr Pro Thr Ser Thr Ser Cys Thr Ile Thr
 80 85 90

gat gtc cag ctg ttc tcc atg gct ccc tac gtg ctc aat gtc acc gcc 337
 Asp Val Gln Leu Phe Ser Met Ala Pro Tyr Val Leu Asn Val Thr Ala
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gtc cac ccc tgg ggc tcc agc agc agc ttc gtg cct ttc ata aca gag 385
 Val His Pro Trp Gly Ser Ser Ser Ser Phe Val Pro Phe Ile Thr Glu
 110 115 120

cac atc atc aag ccc gac cct cca gaa ggc gtg cgc cta agc ccc ctc 433
 His Ile Ile Lys Pro Asp Pro Pro Glu Gly Val Arg Leu Ser Pro Leu
 125 130 135 140

gct gag cgc cac gta cag gtg cag tgg gag cct ccc ggg tcc tgg ccc	481
Ala Glu Arg His Val Gln Val Gln Trp Glu Pro Pro Gly Ser Trp Pro	
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ttc cca gag atc ttc tca ctg aag tac tgg atc cgt tac aag cgt cag	529
Phe Pro Glu Ile Phe Ser Leu Lys Tyr Trp Ile Arg Tyr Lys Arg Gln	
160 165 170	
gga gct gcg cgc ttc cac cgg gtg ggg ccc att gaa gcc acg tcc ttc	577
Gly Ala Ala Arg Phe His Arg Val Gly Pro Ile Glu Ala Thr Ser Phe	
175 180 185	
atc ctc agg gct gtg cgg ccc cga gcc agg tac tac gtc caa gtg gcg	625
Ile Leu Arg Ala Val Arg Pro Arg Ala Arg Tyr Tyr Val Gln Val Ala	
190 195 200	
gct cag gac ctc aca gac tac ggg gaa ctg agt gac tgg agt ctc ccc	673
Ala Gln Asp Leu Thr Asp Tyr Gly Glu Leu Ser Asp Trp Ser Leu Pro	
205 210 215 220	
gcc act gcc aca atg agc ctg ggc aag tagcaagggc ttcccgtgc	720
Ala Thr Ala Thr Met Ser Leu Gly Lys	
225	
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 <213> Homo sapiens

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35 40 45

Thr Leu Pro Pro Ala Pro Asn Ser Thr Ser Pro Val Ser Phe Ile Ala

50

55

60

Thr Tyr Arg Leu Gly Met Ala Ala Arg Gly His Ser Trp Pro Cys Leu
65 70 75 80

Gln Gln Thr Pro Thr Ser Thr Ser Cys Thr Ile Thr Asp Val Gln Leu
85 90 95

Phe Ser Met Ala Pro Tyr Val Leu Asn Val Thr Ala Val His Pro Trp
100 105 110

Gly Ser Ser Ser Ser Phe Val Pro Phe Ile Thr Glu His Ile Ile Lys
115 120 125

Pro Asp Pro Pro Glu Gly Val Arg Leu Ser Pro Leu Ala Glu Arg His
130 135 140

Val Gln Val Gln Trp Glu Pro Pro Gly Ser Trp Pro Phe Pro Glu Ile
145 150 155 160

Phe Ser Leu Lys Tyr Trp Ile Arg Tyr Lys Arg Gln Gly Ala Ala Arg
165 170 175

Phe His Arg Val Gly Pro Ile Glu Ala Thr Ser Phe Ile Leu Arg Ala
180 185 190

Val Arg Pro Arg Ala Arg Tyr Tyr Val Gln Val Ala Ala Gln Asp Leu
195 200 205

Thr Asp Tyr Gly Glu Leu Ser Asp Trp Ser Leu Pro Ala Thr Ala Thr
210 215 220

Met Ser Leu Gly Lys
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Gly Gly Arg Gly Gly Pro Phe Trp Leu Trp Pro Leu Pro Lys Leu Ala
5 10 15

ctg ctg cct ctg ttg tgg gtg ctt ttc cag cgg acg cgt ccc cag ggc 213
Leu Leu Pro Leu Leu Trp Val Leu Phe Gln Arg Thr Arg Pro Gln Gly
20 25 30

agc gcc ggg cca ctg cag tgc tac gga gtt gga ccc ttg ggc gac ttg 261
Ser Ala Gly Pro Leu Gln Cys Tyr Gly Val Gly Pro Leu Gly Asp Leu
35 40 45 50

aac tgc tcg tgg gag cct ctt ggg gac ctg gga gcc ccc tcc gag tta 309
Asn Cys Ser Trp Glu Pro Leu Gly Asp Leu Gly Ala Pro Ser Glu Leu
55 60 65

cac ctc cag agc caa aag tac cgt tcc aac aaa acc cag act gtg gca 357
His Leu Gln Ser Gln Lys Tyr Arg Ser Asn Lys Thr Gln Thr Val Ala
70 75 80

gtg gca gcc gga cgg agc tgg gtg gcc att cct cgg gaa cag ctc acc 405
Val Ala Ala Gly Arg Ser Trp Val Ala Ile Pro Arg Glu Gln Leu Thr
85 90 95

atg tct gac aaa ctc ctt gtc tgg ggc act aag gca ggc cag cct ctc 453
Met Ser Asp Lys Leu Leu Val Trp Gly Thr Lys Ala Gly Gln Pro Leu
100 105 110

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Trp Pro Pro Val Phe Val Asn Leu Glu Thr Gln Met Lys Pro Asn Ala
115 120 125 130

ccc cgg ctg ggc cct gac gtg gac ttt tcc gag gat gac ccc ctg gag 549
Pro Arg Leu Gly Pro Asp Val Asp Phe Ser Glu Asp Asp Pro Leu Glu
135 140 145

gcc act gtc cat tgg gcc cca cct aca tgg cca tct cat aaa gtt ctg 597
Ala Thr Val His Trp Ala Pro Pro Thr Trp Pro Ser His Lys Val Leu
150 155 160

atc tgc cag ttc cac tac cga aga tgt cag gag gcg gcc tgg acc ctg 645
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165 170 175

ctg gaa ccg gag ctg aag acc ata ccc ctg acc cct gtt gag atc caa 693
Leu Glu Pro Glu Leu Lys Thr Ile Pro Leu Thr Pro Val Glu Ile Gln
180 185 190

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Asp Leu Glu Leu Ala Thr Gly Tyr Lys Val Tyr Gly Arg Cys Arg Met
195 200 205 210

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agt ggg gcg gag tgg gcc agg gtg tcc gct gtc aac gcc aca agc tgg Ser Gly Ala Glu Trp Ala Arg Val Ser Ala Val Asn Ala Thr Ser Trp 295 300 305	1029
gag cct ctc acc aac ctc tct ttg gtc tgc ttg gat tca gcc tct gcc Glu Pro Leu Thr Asn Leu Ser Leu Val Cys Leu Asp Ser Ala Ser Ala 310 315 320	1077
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gtg acc tgg caa ccg ggg cct ggg gaa cca ctg gag cat gta gtg gac Val Thr Trp Gln Pro Gly Pro Gly Glu Pro Leu Glu His Val Val Asp 340 345 350	1173
tgg gct cga gat ggg gac ccc ctg gag aaa ctc aac tgg gtc cgg ctt Trp Ala Arg Asp Gly Asp Pro Leu Glu Lys Leu Asn Trp Val Arg Leu 355 360 365 370	1221
ccc cct ggg aac ctc agt gct ctg tta cca ggg aat ttc act gtc ggg Pro Pro Gly Asn Leu Ser Ala Leu Leu Pro Gly Asn Phe Thr Val Gly 375 380 385	1269
gtc ccc tat cga atc act gtg acc gca gtc tct gct tca ggc ttg gcc Val Pro Tyr Arg Ile Thr Val Thr Ala Val Ser Ala Ser Gly Leu Ala 390 395 400	1317
tct gca tcc tcc gtc tgg ggg ttc agg gag gaa tta gca ccc cta gtg Ser Ala Ser Ser Val Trp Gly Phe Arg Glu Glu Leu Ala Pro Leu Val 405 410 415	1365
ggg cca acg ctt tgg cga ctc caa gat gcc cct cca ggg acc ccc gcc Gly Pro Thr Leu Trp Arg Leu Gln Asp Ala Pro Pro Gly Thr Pro Ala 420 425 430	1413
ata gcg tgg gga gag gtc cca agg cac cag ctt cga ggc cac ctc acc Ile Ala Trp Gly Glu Val Pro Arg His Gln Leu Arg Gly His Leu Thr 435 440 445 450	1461

cac tac acc ttg tgt gca cag agt gga acc agc ccc tcc gtc tgc atg His Tyr Thr Leu Cys Ala Gln Ser Gly Thr Ser Pro Ser Val Cys Met 455 460 465	1509
aat gtg agt ggc aac aca cag agt gtc acc ctg cct gac ctt cct tgg Asn Val Ser Gly Asn Thr Gln Ser Val Thr Leu Pro Asp Leu Pro Trp 470 475 480	1557
ggc ccc tgt gag ctg tgg gtg aca gca tct acc atc gct gga cag ggc Gly Pro Cys Glu Leu Trp Val Thr Ala Ser Thr Ile Ala Gly Gln Gly 485 490 495	1605
cct cct ggt ccc atc ctc cgg ctt cat cta cca gat aac acc ctg agg Pro Pro Gly Pro Ile Leu Arg Leu His Leu Pro Asp Asn Thr Leu Arg 500 505 510	1653
tgg aaa gtt ctg ccg ggc atc cta ttc ttg tgg ggc ttg ttc ctg ttg Trp Lys Val Leu Pro Gly Ile Leu Phe Leu Trp Gly Leu Phe Leu Leu 515 520 525 530	1701
ggg tgt ggc ctg agc ctg gcc acc tct gga agg tgc tac cac cta agg Gly Cys Gly Leu Ser Leu Ala Thr Ser Gly Arg Cys Tyr His Leu Arg 535 540 545	1749
cac aaa gtg ctg ccc cgc tgg gtc tgg gag aaa gtt cct gat cct gcc His Lys Val Leu Pro Arg Trp Val Trp Glu Lys Val Pro Asp Pro Ala 550 555 560	1797
aac agc agt tca ggc cag ccc cac atg gag caa gta cct gag gcc cag Asn Ser Ser Ser Gly Gln Pro His Met Glu Gln Val Pro Glu Ala Gln 565 570 575	1845
ccc ctt ggg gac ttg ccc atc ctg gaa gtg gag gag atg gag ccc ccg Pro Leu Gly Asp Leu Pro Ile Leu Glu Val Glu Glu Met Glu Pro Pro 580 585 590	1893
ccg gtt atg gag tcc tcc cag ccc gcc cag gcc acc gcc ccg ctt gac Pro Val Met Glu Ser Ser Gln Pro Ala Gln Ala Thr Ala Pro Leu Asp 595 600 605 610	1941
tct ggg tat gag aag cac ttc ctg ccc aca cct gag gag ctg ggc ctt Ser Gly Tyr Glu Lys His Phe Leu Pro Thr Pro Glu Glu Leu Gly Leu 615 620 625	1989
ctg ggg ccc ccc agg cca cag gtt ctg gcc tgaaccacac gtctggctgg Leu Gly Pro Pro Arg Pro Gln Val Leu Ala 630 635	2039
gggctgccag ccaggctaga gggatgctca tgcagggttc accccagtcc tggattagcc	2099
ctcttgatgg atgaagacac tgaggactca gagaggctga gtcacttacc tgaggacacc	2159
cagccaggca gagctgggat tgaaggaccc ctatagagaa gggcttggcc cccatgggga	2219
agacacggat ggaaggtgga gcaaaggaaa atacatgaaa ttgagagtgg cagctgcctg	2279
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ccagcctggg caatatagca agaccctca ctanaaaat aaaacatcaa aaacaaaaac	2459

aattagctgg gcatgatggc acacacctgt agtccgagcc acttgggagg ctgaggtggg 2519
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 <211> 636
 <212> PRT
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 <220>
 <221> misc feature
 <222> (2433)..(2433)
 <223> Unidentified base.

<400> 12

Met Arg Gly Gly Arg Gly Gly Pro Phe Trp Leu Trp Pro Leu Pro Lys
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Leu Ala Leu Leu Pro Leu Leu Trp Val Leu Phe Gln Arg Thr Arg Pro
 20 25 30

Gln Gly Ser Ala Gly Pro Leu Gln Cys Tyr Gly Val Gly Pro Leu Gly
 35 40 45

Asp Leu Asn Cys Ser Trp Glu Pro Leu Gly Asp Leu Gly Ala Pro Ser
 50 55 60

Glu Leu His Leu Gln Ser Gln Lys Tyr Arg Ser Asn Lys Thr Gln Thr
 65 70 75 80

Val Ala Val Ala Ala Gly Arg Ser Trp Val Ala Ile Pro Arg Glu Gln
 85 90 95

Leu Thr Met Ser Asp Lys Leu Leu Val Trp Gly Thr Lys Ala Gly Gln
 100 105 110

Pro Leu Trp Pro Pro Val Phe Val Asn Leu Glu Thr Gln Met Lys Pro
 115 120 125

Asn Ala Pro Arg Leu Gly Pro Asp Val Asp Phe Ser Glu Asp Asp Pro
 130 135 140

Leu Glu Ala Thr Val His Trp Ala Pro Pro Thr Trp Pro Ser His Lys
 145 150 155 160

Val Leu Ile Cys Gln Phe His Tyr Arg Arg Cys Gln Glu Ala Ala Trp

165										170					175				
Thr	Leu	Leu	Glu	Pro	Glu	Leu	Lys	Thr	Ile	Pro	Leu	Thr	Pro	Val	Glu				
			180						185					190					
Ile	Gln	Asp	Leu	Glu	Leu	Ala	Thr	Gly	Tyr	Lys	Val	Tyr	Gly	Arg	Cys				
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Arg	Met	Glu	Lys	Glu	Glu	Asp	Leu	Trp	Gly	Glu	Trp	Ser	Pro	Ile	Leu				
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Ser	Phe	Gln	Thr	Pro	Pro	Ser	Ala	Pro	Lys	Asp	Val	Trp	Val	Ser	Gly				
225					230					235					240				
Asn	Leu	Cys	Gly	Thr	Pro	Gly	Gly	Glu	Glu	Pro	Leu	Leu	Leu	Trp	Lys				
				245					250						255				
Ala	Pro	Gly	Pro	Cys	Val	Gln	Val	Ser	Tyr	Lys	Val	Trp	Phe	Trp	Val				
			260					265					270						
Gly	Gly	Arg	Glu	Leu	Ser	Pro	Glu	Gly	Ile	Thr	Cys	Cys	Cys	Ser	Leu				
		275					280					285							
Ile	Pro	Ser	Gly	Ala	Glu	Trp	Ala	Arg	Val	Ser	Ala	Val	Asn	Ala	Thr				
	290					295					300								
Ser	Trp	Glu	Pro	Leu	Thr	Asn	Leu	Ser	Leu	Val	Cys	Leu	Asp	Ser	Ala				
305					310					315					320				
Ser	Ala	Pro	Arg	Ser	Val	Ala	Val	Ser	Ser	Ile	Ala	Gly	Ser	Thr	Glu				
				325					330					335					
Leu	Leu	Val	Thr	Trp	Gln	Pro	Gly	Pro	Gly	Glu	Pro	Leu	Glu	His	Val				
			340					345					350						
Val	Asp	Trp	Ala	Arg	Asp	Gly	Asp	Pro	Leu	Glu	Lys	Leu	Asn	Trp	Val				
		355					360					365							
Arg	Leu	Pro	Pro	Gly	Asn	Leu	Ser	Ala	Leu	Leu	Pro	Gly	Asn	Phe	Thr				
	370					375					380								
Val	Gly	Val	Pro	Tyr	Arg	Ile	Thr	Val	Thr	Ala	Val	Ser	Ala	Ser	Gly				
385					390					395					400				
Leu	Ala	Ser	Ala	Ser	Ser	Val	Trp	Gly	Phe	Arg	Glu	Glu	Leu	Ala	Pro				
				405					410					415					

Leu Val Gly Pro Thr Leu Trp Arg Leu Gln Asp Ala Pro Pro Gly Thr
420 425 430

Pro Ala Ile Ala Trp Gly Glu Val Pro Arg His Gln Leu Arg Gly His
435 440 445

Leu Thr His Tyr Thr Leu Cys Ala Gln Ser Gly Thr Ser Pro Ser Val
450 455 460

Cys Met Asn Val Ser Gly Asn Thr Gln Ser Val Thr Leu Pro Asp Leu
465 470 475 480

Pro Trp Gly Pro Cys Glu Leu Trp Val Thr Ala Ser Thr Ile Ala Gly
485 490 495

Gln Gly Pro Pro Gly Pro Ile Leu Arg Leu His Leu Pro Asp Asn Thr
500 505 510

Leu Arg Trp Lys Val Leu Pro Gly Ile Leu Phe Leu Trp Gly Leu Phe
515 520 525

Leu Leu Gly Cys Gly Leu Ser Leu Ala Thr Ser Gly Arg Cys Tyr His
530 535 540

Leu Arg His Lys Val Leu Pro Arg Trp Val Trp Glu Lys Val Pro Asp
545 550 555 560

Pro Ala Asn Ser Ser Ser Gly Gln Pro His Met Glu Gln Val Pro Glu
565 570 575

Ala Gln Pro Leu Gly Asp Leu Pro Ile Leu Glu Val Glu Glu Met Glu
580 585 590

Pro Pro Pro Val Met Glu Ser Ser Gln Pro Ala Gln Ala Thr Ala Pro
595 600 605

Leu Asp Ser Gly Tyr Glu Lys His Phe Leu Pro Thr Pro Glu Glu Leu
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Gly Leu Leu Gly Pro Pro Arg Pro Gln Val Leu Ala
625 630 635

<210> 13
<211> 15
<212> PRT

<213> Synthetic.

<400> 13

Gly Ser Gly Ser Gly Gly Ser Gly Gly Ser Gly Ser Gly Lys Leu
1 5 10 15